



(12) **United States Patent**  
**Mackenzie et al.**

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(54) **SCALABILITY IMPROVEMENT IN A SYSTEM WHICH INCREMENTALLY UPDATES CLIENTS WITH EVENTS THAT OCCURRED IN A CLOUD-BASED COLLABORATION PLATFORM**

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(57) **ABSTRACT**

Techniques are disclosed for improving scalability in a system which incrementally updates remote clients with events that occurred in a cloud-enabled platform. In one embodiment, a method comprises, in response to an action from a user in the cloud-enabled platform, determining a list of events to update one or more collaborators of the user about the action. The method further comprises separating the list of events into a plurality of sub-lists of events such that each sub-list of events can be stored in a database within a designated amount of time, and further comprises storing the plurality of sub-lists of events into the database to be read by the one or more collaborators. Among other advantages, embodiments disclosed herein provide enhancement in scalability, robustness and availability for cloud-based collaboration platforms with large numbers of collaborators by incorporating mechanisms to divide-and-conquer the workload of event updates in such platforms.

**25 Claims, 12 Drawing Sheets**

